

Response  
U.S. Serial No. 10/603,572  
Filed: June 25, 2003  
Attorney Docket No: 979-002CIP

### REMARKS

The Restriction Requirement under 37 CFR 1.111 mailed from the United States Patent and Trademark Office on September 30, 2004 indicates that Claims 1-30 are pending and that the previous response was not fully responsive in that an election of a single invention is required and was not made. Applicant indicates hereinbelow that the Amendment and Response filed on July 29, 2004 was fully responsive, and that **the amendments to the claims made therein make a Restriction Requirement INAPPROPRIATE**. Furthermore, the Examiner has not indicated how Claims 21-30 are distinctly grouped from Claims 1-10.

As is apparent from the list of pending claims, which were earlier presented in a paper submitted on July 29, 2004, original Claims 1-10 (with Claim 7 having been amended) and Claims 21-30 are pending in the application, and original Claims 11-20 have been cancelled without prejudice. Claims 21-30 were presented in a *bona fide* attempt to claim subject matter previously presented in cancelled Claims 11-20, but with explicit reference to and dependence on the apparatus of Claim 1.

The Examiner had previously argued that Applicant was required to elect one invention of several inventions, in Group I (Claims 1-10), Group II (Claims 11-14 and 18-20, now cancelled), or Group III (Claims 15-17, now cancelled), based on the argument that **“[t]he subcombinations are distinct from each other if they are shown to be separately usable.”** The Examiner further argued that “[b]ecause these inventions are distinct for the reasons given above and **the search required for one group is not required for other groups**, restriction for examination purposes as indicated is proper.” (emphasis added)

The Examiner previously had presented the argument that Claims 1-10 are drawn to “guiding a robotic apparatus.” Applicant submits that Claim 1 simply recites an apparatus, particularly a programmable robotic apparatus, and recites no action whatsoever, in particular not the action of “guiding.”

Claim 1 recites

A programmable robotic apparatus, comprising:

a drive system comprising a plurality of independently operable treads;

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a control module in electrical communication with said drive system, said control module configured to command the operation of each tread;  
a memory module in electrical communication with said control module, said memory module configured to store and retrieve information; and  
an environmental signal detection module in electrical communication with said control module, said environmental signal detection module configured to discern at least one of a location and an orientation of said programmable robotic apparatus.

Applicant does not understand where the Examiner reads the action of “guiding” anywhere within Claim 1, which recites an apparatus comprising a drive system (a thing), a control module (a thing), a memory module (a thing), and an environmental signal detection module (also a thing). Things standing by themselves are not actions.

Applicant presented dependent Claims 21, 25 and 28 that explicitly refer to the apparatus of Claim 1, and that require the presence of the apparatus of Claim 1 in order to infringe any of dependent Claims 21, 25 and 28. By the black letter law of 35 USC §112, fourth paragraph, Claims 21, 25, and 28 include all of the limitations of Claim 1, as do all of dependent Claims 22-24, 26-27, and 29-30.

35 USC 112, Fourth Paragraph

Subject to the following paragraph, a claim in dependent form shall contain a reference to a claim previously set forth and then specify a further limitation of the subject matter claimed. A claim in dependent form shall be construed to incorporate by reference all the limitations of the claim to which it refers. (emphasis added)

Claim 21 recites:

The programmable robotic apparatus of Claim 1, further comprising at least one command recorded on a machine-readable medium, said at least one command representing an instruction for traversing an area of interest, said programmable robotic apparatus being adapted to autonomously traverse an area of interest by the performance of the steps of:

operating said programmable robotic apparatus according to said at least one command recorded on said machine-readable medium;  
discerning an orientation of said programmable robotic apparatus;  
comparing said orientation of said programmable robotic apparatus to a direction recorded in said at least one command to determine an error signal; and  
in the event that said error signal exceeds a predetermined value, commanding said programmable robotic apparatus to take a corrective action;  
whereby said programmable robotic apparatus autonomously traverses said area of interest.

In the considered opinion of Applicant's attorney, Claim 21 recites all of the apparatus of Claim 1, and adds a restriction or limitation in that it FURTHER COMPRISES at least one command recorded on a machine readable medium. The claim goes on to describe the internal logic or operation of the apparatus using the command. Therefore, Claim 21 depends from Claim 1, is not usable separately from the apparatus of Claim 1, and is not properly subject to a restriction or election requirement relative to Claim 1. Claim 21 cannot be infringed without also infringing Claim 1.

Claim 25 recites:

The programmable robotic apparatus of Claim 1, configured to record at least one command on a machine-readable medium, the at least one command representing an instruction for traversing an area of interest, wherein the recording of said at least one command is accomplished by performing the steps of:

operating said programmable robotic apparatus under external control, the programmable robotic apparatus receiving directives from an external source and traversing an area of interest;  
taking readings from an environmental signal detection module of said programmable robotic apparatus; and  
recording said directives and readings on a machine-readable medium for later recovery.

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In the considered opinion of Applicant's attorney, Claim 25 recites all of the apparatus of Claim 1, and FURTHER adds a restriction or limitation of being configured to record at least one command on a machine-readable medium. Claim 25 then goes on to describe how the recording of the command is to be accomplished. Therefore, Claim 25 depends from Claim 1, is not usable separately from the apparatus of Claim 1, and is not properly subject to a restriction or election requirement relative to Claim 1. Claim 25 cannot be infringed without also infringing Claim 1.

Claim 28 recites:

The programmable robotic apparatus of Claim 1, further comprising a computer program recorded on a machine-readable medium, said computer program comprising:

- a supervisory module that controls the autonomous operation of the programmable robotic apparatus of Claim 1 and that, as required, receives information recorded on a machine-readable medium;
- an orientation receiver module that derives orientation information from a environmental signal detection module of said programmable robotic apparatus, and
- a computation module that computes an error signal based at least in part on orientation information derived from said environmental signal detection module and information recorded on said machine-readable medium.

In the considered opinion of Applicant's attorney, Claim 28 recites all of the apparatus of Claim 1, and adds a restriction or limitation in that it FURTHER COMPRISES a computer program recorded on a machine-readable medium. Claim 28 then goes on to describe the elements of the computer program at the module level. Therefore, Claim 28 depends from Claim 1, is not usable separately from the apparatus of Claim 1, and is not properly subject to a restriction or election requirement relative to Claim 1. Claim 28 cannot be infringed without also infringing Claim 1.

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Applicant submits that the apparatus described in dependent Claim 21, Claim 25, and Claim 28, and in all the claims that depend therefrom are inseparably tied to the apparatus recited in Claim 1, cannot be used separately therefrom, cannot be infringed without also infringing at least Claim 1, and that therefore, **a Restriction Requirement is not appropriate**. Applicant therefore TRAVERSES the Restriction Requirement, and submits that the claims as presently presented are appropriate for consideration as a single group.

### CONCLUSION

Applicant submits that Claims 1-10 and 21-30 are now in proper condition for allowance, and requests the issuance of a Notice of Allowance at the Examiner's earliest convenience.

If the Examiner believes that contact with Applicant's attorney would be advantageous toward the disposition of this case, the Examiner is requested to call Applicant's attorney at the phone number noted below.

Respectfully submitted,  
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